

OIPE

RAW SEQUENCE LISTING DATE: 07/28/2000
PATENT APPLICATION: US/09/619,049 TIME: 13:42:09

Input Set : D:\Seqlist.txt
Output Set : N:\CRF3\07282000\I619049.raw

ENTERED

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4 <110> APPLICANT: YANDELL, MARK
6 <120> TITLE OF INVENTION: ISOLATED DROSOPHILA PROTEINS ESSENTIAL
7 FOR SURVIVAL, NUCLEIC ACID MOLECULES ENCODING ESSENTIAL
8 DROSOPHILA PROTEINS, AND USES THEREOF AS INSECTICIDAL
9 TARGETS
11 <130> FILE REFERENCE: CL000735
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/619,049
C--> 13 <141> CURRENT FILING DATE: 2000-07-18
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14 <151> PRIOR FILING DATE: 1999-12-23
16 <150> PRIOR APPLICATION NUMBER: 60/171,627
17 <151> PRIOR FILING DATE: 1999-12-23
19 <150> PRIOR APPLICATION NUMBER: 60/175,763
20 <151> PRIOR FILING DATE: 2000-01-12
22 <150> PRIOR APPLICATION NUMBER: 60/175,685
23 <151> PRIOR FILING DATE: 2000-01-12
25 <150> PRIOR APPLICATION NUMBER: 60/186,663
26 <151> PRIOR FILING DATE: 2000-03-03
28 <150> PRIOR APPLICATION NUMBER: 60/187,241
29 <151> PRIOR FILING DATE: 2000-03-03
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33 <170> SOFTWARE: FastSEQ for Windows Version 4.0
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43 acaagtcata ctcccgtcg attgatcttc agaccgcac cagcagttgg gaagattgaa 180
44 cgcgcctgtg acggtggtag gcggacttct aaattggggg gttgcagtcg gcctcccgaa 240
45 ctccctgtcg ctatctctat tccctttgtt aactctctta gtttctaatt tattctgcga 300
46 aatgtgccaa aaattaattt aattcaaaagt gtattttttt ttgttttttt gtttgtaatc 360
47 ttagggcgga gacaagtcga aacaaaattg aactggcagc aaaatgacaa attcgactg 420
48 ggcacagtgt gaacatgtca tattgctgcc ggtgaaacaa tcacatattt agttagcagt 480
49 gtatccatat tgtgatgtgc tctctagtag tatagtataa ggcccaaggc ccgaaacgca 540
50 cctggaacag ggtatagtgc gttccatact tatcaggtcg gctgcttagc tgcaagagta 600
51 cctgacacat atatacagct agtgtgagtc ggaatccttg gacctggata tgcttatgct 660
52 cgtaaccctt caactaaacc aatatatcaa ctacaatata ttttatata taattatata 720
53 atacttatgt tactttatgg aaatctgtag tattcgaaat agcagaaacc gcaactgccc 780
54 gaaaagcgcg aggaagcgga gaagagaaga gaaaagaaaa gaagagaaga cgaagtggag 840
55 aaagagggag caaatagtta aagcaaatat tacattacta ctatgcgtat gattatttta 900
56 ttcatacata caaatattta tategaaatg cattcctaaa caacatgttc gtgttaagtt 960
57 acaaaaataa ttaaagtatt tatttaaatt acacgccttc tcaaaaggccc accaatttgc 1020
58 ctccctatgat atccaattga gccgtgatcc ccttcgtcac gctgcgcgcc aactctttgg 1080
59 gcttctgcaa gagagaaatg gggggaagag agtgggtcaag agagggaaaag ctggcactgg 1140
60 aactgacctt gctcaaaagc aagcgcaagc gcacacgacg agcgactaat tgcataagca 1200

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61 gtgccagcgg gtcgtggtac tgtcaatctg gcttgaaaat agccaaagact caaggacttg 1260
62 cagtaatact gacagctaag gccgtaagtt gataggctct ttcgtacgca tgtttaaagt 1320
63 attgtttaaa tttgttttgg ctgctgagcc ggtgcatcgc tgggaccatt atgcaacgtg 1380
64 tgtgcgaatg gattgaccaa gaaacagggc aaacaaacaa accaaacaca atggctcgca 1440
65 tttcggcact ccttcacctg aataaagggt ttgagcaggt tggaaaaggc ctctagcccg 1500
66 ttgacaatgg atcgcgagat gccgtcgaaac atgtcacctg tgttgccgta cttctcgtgc 1560
67 tcaactgatg agtccaaaat gggaaacgggc tgaatcaaaa actgggtcct agtggctctg 1620
68 gtctttgggt gatataata tgtatcacat cacttacctg cgccaaatcg gccagcctct 1680
69 tttgactggt gtcgtacacg ctacgacact tcgagggaat ggctcctgc tctagattca 1740
70 ccgattccgc cgttttagcc ggagtgggca ggagagagat ctgccgaaaa ataaggggaa 1800
71 gtcaacttga tttttaaagt atacctcgtt tactcacctt gaaccggcg tcgctggcct 1860
72 gcgcgtgggt ggattcccg gagctgtcgg cgcatcgaa agcatcctgg gctccgaagt 1920
73 cgccggccga gacgcccggc tcgatggcg tggcgccatc gggcgtggca ggagctatg 1980
74 gcgtggcaca gatgcagcgc atcatggcca agagcagcag cagagtattc atcttttgaa 2040
75 gttgcagcat tttcgttagt atgtcggag aagggggaaa gggcccaact atgtggtttt 2100
76 ataacaaggt gaaaacttcc aaatccaaat cccagggttga gcttcgatcc gaagtctctc 2160
77 gagtccaaaa ttcaactgaa tagctgcgtc tgcgcaacga ttttattggt ttaaccgcac 2220
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82 tgggatatatt gattcattta agtagttcac ttagttcact cttgttcaaa gctccaaggc 2520
83 ttgttcaact ttaggaaaac taaaatttta tctaatactc tctttatctc gcgagagccg 2580
84 cctaaatttt ttctacagtc gtagtgatt gatcgttatc gtaatgacaa caacaaatag 2640
85 tcataaaact gtaacaataa caacatagtc gaaatctgca acttgttgcg gtcaacaaat 2700
86 gttgccgtca ttctgtcgca acaatgagga aggaaactcg gcttacttgg ttactcagt 2760
87 tagttggtca atcggtagcc tcactcccca tctactcccg ccagtccatc agtaaaacc 2820
88 ccgcgacaca tatgctggtt gtgcaattac gaccacactg aaagaaatc aatacaatga 2880
89 cgtaaacatc gccatgaact aaacactttt tattgatagg aaatgagtt ttctcgtttg 2940
90 caggatttt ttgccagtga atttgcagg caacaacacc accgcgcgcc acttttacat 3000
91 ttcatgcaac tcaatcaatt aagagagaga gaggttactc gcaacaaggc 3050
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100 tgtgccacgc ccatagctcc tgccacgccc gatggcgcca cgcccatcga cgcccgcgtc 120
101 tcggccgcgc acttcggagc ccaggatgct ttgatgccc ccgacagctc cgcggaatcc 180
102 acccacgcgc aggccagcga cgccgggttc aagatctctc tctgcccac tccggctaaa 240
103 acggcggaat cgggtgaatc agagcaggag gccattccct cgaagggtgt gagcgtgtac 300
104 gacaacagtc aaaagaggct ggcgattttg gcgcagcccg ttcccatatt ggactccatc 360
105 agtgagcacg agaagtacgg caacaacggg gacatgttcg acggcatctc gcgatccatt 420
106 gtcaacggct acgaggcctt ttccaacctg ctcaaacctt ttattcagaa gcccacagag 480
107 ttggcgcgca gcgtgacgaa ggggatcacg gctcaattgg atatcatagg aggcacaaatg 540
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110 <210> SEQ ID NO: 3
111 <211> LENGTH: 183
112 <212> TYPE: PRT

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119 20 25 30
120 Ala Thr Pro Ile Asp Ala Arg Val Ser Ala Ala Asp Phe Gly Ala Gln
121 35 40 45
122 Asp Ala Phe Asp Ala Ala Asp Ser Ser Ala Glu Ser Thr His Ala Gln
123 50 55 60
124 Ala Ser Asp Ala Gly Phe Lys Ile Ser Leu Leu Pro Thr Pro Ala Lys
125 65 70 75 80
126 Thr Ala Glu Ser Val Asn Leu Glu Gln Glu Ala Ile Pro Ser Lys Val
127 85 90 95
128 Leu Ser Val Tyr Asp Asn Ser Gln Lys Arg Leu Ala Asp Leu Ala Gln
129 100 105 110
130 Pro Val Pro Ile Leu Asp Ser Ile Ser Glu His Glu Lys Tyr Gly Asn
131 115 120 125
132 Asn Gly Asp Met Phe Asp Gly Ile Ser Arg Ser Ile Val Asn Gly Tyr
133 130 135 140
134 Glu Ala Phe Ser Asn Leu Leu Asn Thr Phe Ile Gln Lys Pro Lys Glu
135 145 150 155 160
136 Leu Ala Arg Ser Val Thr Lys Gly Ile Thr Ala Gln Leu Asp Ile Ile
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138 Gly Gly Lys Leu Val Gly Leu
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143 <211> LENGTH: 3479
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150 cagttatatc ctaataggat tagttattaa gctccggttt ttttttggtc tctttaaaag 180
151 ttttagtttt tttagatata aataatggcg ttctttgtac acatttttct ctgtgcacat 240
152 taaacggctc tttttgcaat tgaactgcaa tagtaacagt cacgaaaggc agtcaaaaac 300
153 aaagaaaaac ggcacttcaa gtgcgcaatg gcctcatttt tgggggcagt aaatgtagcg 360
154 cgtagccaaa ttgctctgca ttctgaaata tcagacattg caattatcta tcgagtattc 420
155 actaaatgta gttattttt taagcttttg ctttcgagct ttcaaaattg gcgcgtactt 480
156 ttaacagtaa ctgttagcag tgtactgtta agtctgcatg cgatctggca gctcagttat 540
157 agaattattt ttggccaaac cagagtaact catttcgctc ttggattgaa gatgttttta 600
158 aggccgcttt aatggcggtg acaattacaa aatttcgaac ttcgaggggg atggtggtg 660
159 ccgtacagcc cacagtgtg ttgagcccca aaataccaga ttcccaggat aacgaaaagg 720
160 taatcaaaaa tctgtcaaat gtataaactc tcctcctatt tggtacaatt cggcgttgcc 780
161 aaatcgtgaa aaggtgctat tgaccagctg ttttgtagaa tacgtgatac gtacgggctg 840
162 agcacatttt gtttaaaatt taaatcatga taaagttagt aattatattt acttatttgc 900
163 acagaaaccg ttttcaaaat cggagcggg aaatgcaact gtgagagtta atgcagggtg 960
164 tatagttctt aacaaaatac cagcgattat aaggccaagt atgaagagag cagcaacaac 1020
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166 gggatgtgag taacaaccaa tcgaacacta atatgaaata taaacaaatg gtttttaaat 1140
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168 cgagtggatc ctctggccat cagctccaga tgctggcgag gaaggacact caaagtcttg 1260
169 gagtggccat caattcactg cgcaccaaca caatcatcaa agcaaccaca agaccttcac 1320
170 aaacagcgcc tttagaccca aactcagcgg ctgtcacgcc aagcacgcgg agcagtagca 1380
171 ggaattccac tcagtcacaca ccaactgtgg tacctgatgc gagagtttcc tccgcccgtg 1440
172 gccaagctgt gttcatcaag agggagctac cccagccgca gaggagcatg cgaatatga 1500
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174 cactgctgaa acgccaatgc tgccgcaatg ctaatgtcac ccacttggac tgttgcttga 1620
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189 ccaagagttg gaattctaaa taagaagtgc catccgcgaa ggtctgttta aaggccaacc 2520
190 agatgtttatt gtcttagtta ttttaagaat ttaatttaat gtattgttaa tgcaatgtag 2580
191 aaactgacta ttaacaagta cgattaaaag ggtatatttt aaagtatttc aaagaataaa 2640
192 cactacgtgg tcattcaaga ggtttttgct tttatctgga aacatactca agtgccttat 2700
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215 actagtccga gtggatcctc tggccatcag ctccagatgc tggcgaggaa ggacactcaa 180
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217 ccttcacaaa cagcgcttt gacacaaaac tcagcggctg tcacgccaaag cagcgccgagc 300
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220 aatatgacac ttggtttggt ggaacaggcg ccaactgctc atttgggtgt tgcgccacag 480
221 cacctgtcac tgctgaaacg ccatatctgc cgcaatgcta atgtcaccca ctgggactgt 540
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225 accccactga actaccgagc caacctgttg catgtacgct cgttgatcga gtgtgtggaa 780
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234 attaagcaaa agtcattgct gggttatctt gatgaaatga tcgtggtggc tgcgggtcta 1320
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248 35 40 45
249 His Gln Leu Gln Met Leu Ala Arg Lys Asp Thr Gln Ser Leu Gly Val
250 50 55 60
251 Ala Ile Asn Ser Leu Pro Pro Asn Thr Ile Ile Lys Ala Thr Thr Arg
252 65 70 75 80
253 Pro Ser Gln Thr Ala Pro Leu Thr Pro Asn Ser Ala Ala Val Thr Pro
254 85 90 95
255 Ser Thr Pro Ser Ser Ser Arg Asn Ser Thr Gln Ser Thr Pro Thr Val
256 100 105 110
257 Val Pro Asp Ala Arg Val Ser Ser Ala Val Arg Gln Ala Val Phe Ile
258 115 120 125
259 Lys Arg Glu Leu Pro Gln Pro Gln Arg Ser Met Arg Asn Met Thr Leu
260 130 135 140
261 Gly Leu Val Glu Gln Ala Pro Leu Leu His Leu Gly Val Ala Pro Gln
262 145 150 155 160
263 His Leu Ser Leu Leu Lys Arg His Ile Cys Arg Asn Ala Asn Val Thr
264 165 170 175
265 His Leu Asp Cys Cys Leu Thr Leu Arg Lys Leu Lys Gln Asn Glu His
266 180 185 190
267 Phe Ala Leu Leu Ala Glu His Phe Glu Leu Ser Glu Ser Asp Val Glu

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L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date